



Marketing Turtle and Lake Health: Effective Engagement of Lake Communities in Stewardship and Citizen Science

Erin Nadeau

Adopt-A-Pond Wetland Conservation Programme

Toronto Zoo



Outreach, Communication & Stewardship



**FROGWATCH
ONTARIO**

toronto ZOO

TURTLES OF ONTARIO IDENTIFIER

Turtles are illustrated at half life size.

COMMON MUSKIE
Apemone insculpta

- 12-18 in. shell, round 12-17 in.
- Larger males with an oval, lighter-colored shell.
- High-domed, rounded carapace.
- Plastron is oval, yellow-brown and green like, posterior or edge of "bridge" (ridge between the front of plastron) strongly raised, that extends to a prominent ridge on each side of head.
- Headed black, moderate to wide and broad.
- Headed for heavy side produced after hatched (also called "horns").
- Live 1-10 years, some 15+.
- Lay 100-200 eggs.
- Hatchlings 10-15 mm.

MIDLAND PAINTED
Chrysemys picta marginata

- 12-18 in. shell, round 12-15 in.
- Headed large, oval, round.
- Smooth, olive to brownish-grey, reddish and black markings.
- Headed black, moderate to wide and broad.
- Headed for heavy side produced after hatched (also called "horns").
- Live 1-10 years, some 15+.
- Lay 100-200 eggs.
- Hatchlings 10-15 mm.

SPOTTED
Chrysemys picta

- 12-18 in. shell, round 12-15 in.
- Headed large, oval, round.
- Orange, yellow, and black spots on the head and neck.
- Headed black, moderate to wide and broad.
- Headed for heavy side produced after hatched (also called "horns").
- Live 1-10 years, some 15+.
- Lay 100-200 eggs.
- Hatchlings 10-15 mm.

WOOD
Desmognia (Chrysemys) insculpta

- 12-18 in. shell, round 12-15 in.
- Headed large, oval, round.
- Orange, yellow, and black spots on the head and neck.
- Headed black, moderate to wide and broad.
- Headed for heavy side produced after hatched (also called "horns").
- Live 1-10 years, some 15+.
- Lay 100-200 eggs.
- Hatchlings 10-15 mm.

WESTERN PAINTED
Chrysemys picta bellii

- 12-18 in. shell, round 12-15 in.
- Headed large, oval, round.
- Orange, yellow, and black spots on the head and neck.
- Headed black, moderate to wide and broad.
- Headed for heavy side produced after hatched (also called "horns").
- Live 1-10 years, some 15+.
- Lay 100-200 eggs.
- Hatchlings 10-15 mm.

BLANDING'S
Emydoidea blandingii

- 12-18 in. shell, round 12-15 in.
- Headed large, oval, round.
- Orange, yellow, and black spots on the head and neck.
- Headed black, moderate to wide and broad.
- Headed for heavy side produced after hatched (also called "horns").
- Live 1-10 years, some 15+.
- Lay 100-200 eggs.
- Hatchlings 10-15 mm.

NORTHERN MAP
Apemone geographicus geographicus

- 12-18 in. shell, round 12-15 in.
- Headed large, oval, round.
- Orange, yellow, and black spots on the head and neck.
- Headed black, moderate to wide and broad.
- Headed for heavy side produced after hatched (also called "horns").
- Live 1-10 years, some 15+.
- Lay 100-200 eggs.
- Hatchlings 10-15 mm.

Toronto Zoo
2915 Don Mills Ave.
Scarborough, ON M1B 5K7
CANADA

Community-Based Social Marketing

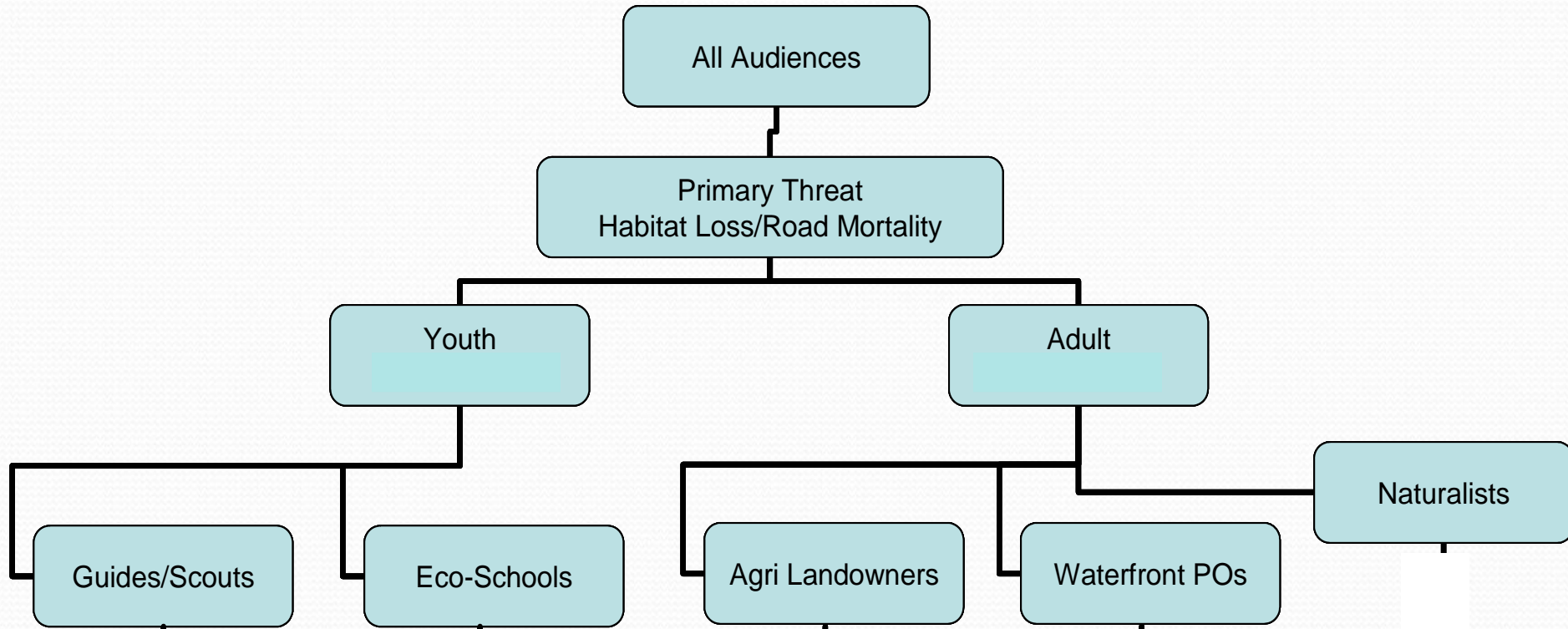
Information	Social Marketing	Law Enforcement/ Policy
	Marketing of a behaviour rather than marketing of a product	
Audience is willing to adopt the new behaviour	Audience is somewhat resistant to adopt the new behaviour	Audience is very resistant to change
Audience sees self- benefit	Self-benefit is not that easy to see	Audience does not see any self-benefit
No competition with another behaviour	Moderate competition with another behaviour	Strong competition with another behaviour

Program Goals

- Advance conservation by creating behaviour change
- Better understand who we should be working with
- Improve outreach, communication, and marketing efforts



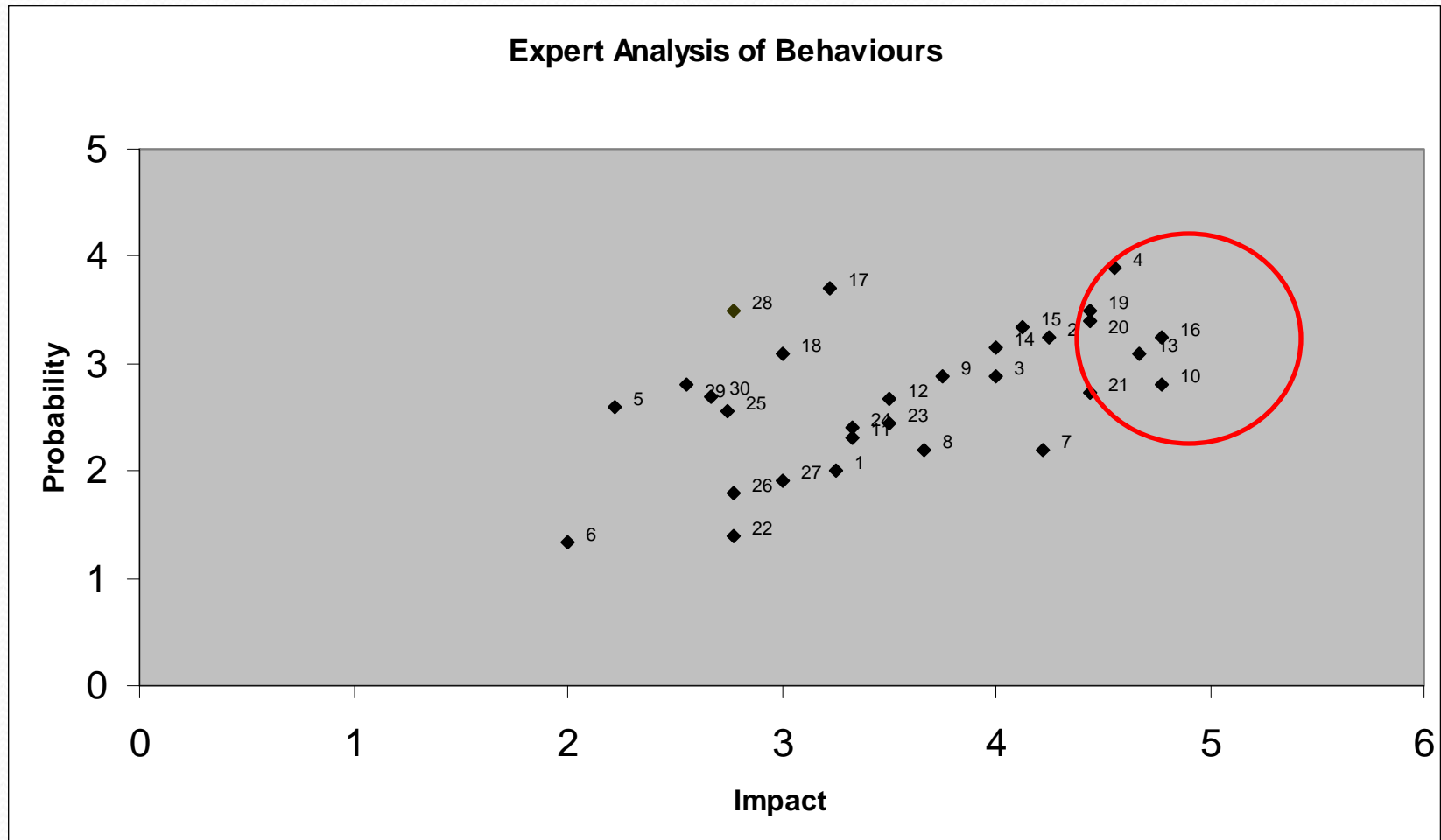
Target Audience Selection



Selecting Behaviours

	Behaviour	Audience	Prob	Impact
16	Forgoing deliberate driving over of turtles	Waterfront property owners	4.8	3.3
4	Inclusion of turtle habitat conservation as a component in Lake Management Plans	Waterfront property owners	4.6	3.9
19	Forgoing deliberate hunting/shooting/removal of snapping turtles	Waterfront property owners	4.4	3.5
2	Creating nesting sites/beaches on private waterfront lands	Waterfront property owners	4.3	3.3
7	Eliminating shore armouring and barriers on private waterfront lands	Waterfront property owners	4.2	2.2
15	Assisting turtles in crossing roads	Waterfront property owners	4.1	3.3
14	Slowing average car speed from May-June in areas with posted turtle signs	Waterfront property owners	4.0	3.2
3	Naturalizing shorelines on private waterfront lands	Waterfront property owners	4.0	2.9

Charting Probability and Impact



Selecting Behaviours

	Behaviour	Audience	Prob	Impact
★	16 Forgoing deliberate driving over of turtles	Waterfront property owners	4.8	3.3
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Research: Surveying and Focus Groups

- Allowed us to better understand key behaviours
 - What are people willing to do
 - What are people interested in
 - What they value

The following lists a number of common waterfront property owner concerns, please indicate which 2 are the **MOST** significant for you.

- Having a well manicured shoreline
- Outsiders moving onto the lake
- Nuisance wildlife
- Boat noise/traffic
- Water quality
- Wildlife conservation
- Quality of swimming areas
- Overdevelopment on the lake
- Maintaining property value



Research: Surveying and Focus Groups

- Provided input on barriers and benefits
 - What resources are required
 - How could people become motivated

What are the two most likely reasons that you would choose to naturalize the shoreline of your property?

- It would attract wildlife to my property
- It is good for the water quality of the lake
- It requires less upkeep
- I prefer how it looks



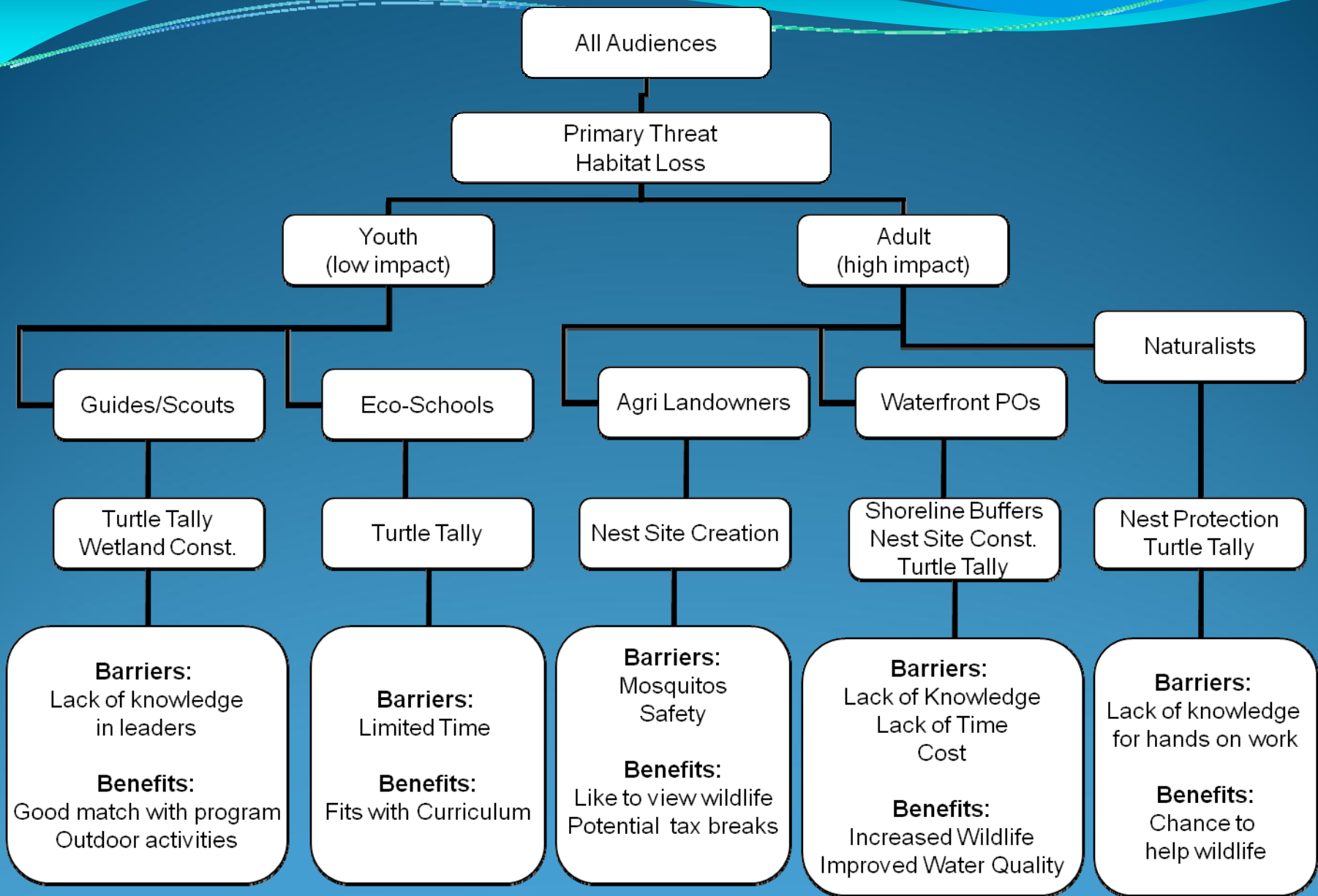
Research: Surveying and Focus Groups

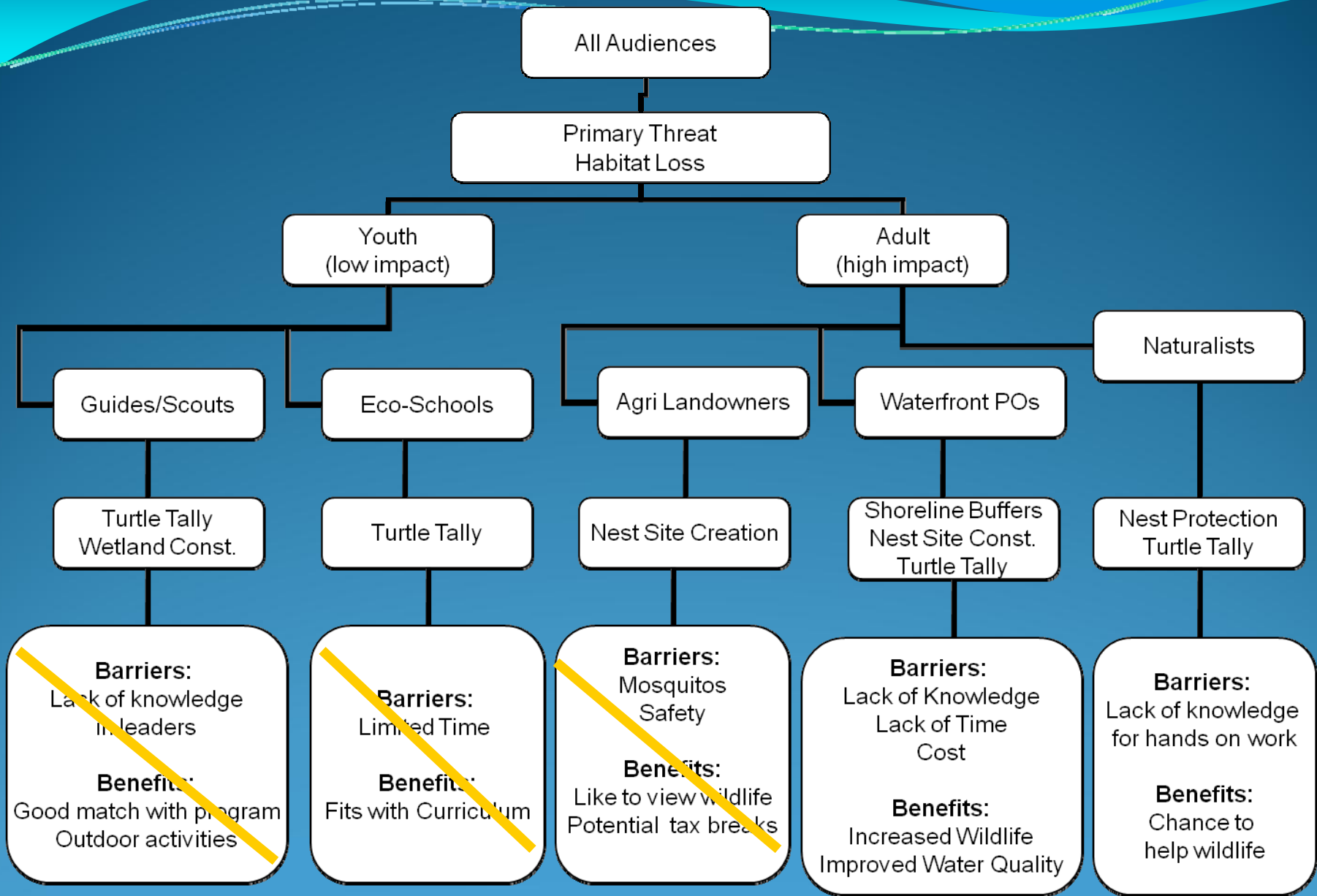
- Helped to develop a marketing approach
 - Key words and phrases
 - Best methods and locations to advertise

What are some of the best ways to let you know about turtle conservation and programs? More than one answer can be selected?

- Articles in local newspapers
- Billboards or posters
- Brochures/Newsletters mailed to you
- Displays at local fairs/boat shows, etc.
- Displays at local stores
- Door to door visits by Toronto Zoo staff
- E-mails/E-newsletters
- Programs/workshops offered in your town
- Website
- Other (please specify) _____







All Audiences

Primary Threat
Habitat Loss

Youth
(low impact)

Adult
(high impact)

Guides/Scouts

Eco-Schools

Agri Landowners

Waterfront POs

Naturalists

Turtle Tally
Wetland Const.

Turtle Tally

Nest Site Creation

Shoreline Buffers
Nest Site Const.
Turtle Tally

Nest Protection
Turtle Tally

Barriers:
Lack of knowledge
in leaders

Benefits:
Good match with program
Outdoor activities

Barriers:
Limited Time

Benefits:
Fits with Curriculum

Barriers:
Mosquitos
Safety

Benefits:
Like to view wildlife
Potential tax breaks

Barriers:
Lack of Knowledge
Lack of Time
Cost

Benefits:
Increased Wildlife
Improved Water Quality

Barriers:
Lack of knowledge
for hands on work

Benefits:
Chance to
help wildlife

Findings

- Value water quality and wildlife (loons, turtles, bullfrogs)
- Interest in local wildlife conservation
- More likely to get involved if lake specially selected
- Unsure how to begin stewardship actions of lake plan
- Interest in information/data about lake wildlife
- Each lake at different stage of stewardship/different priorities



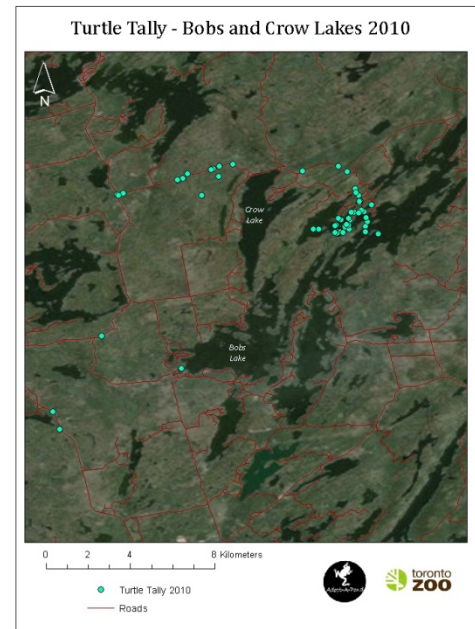
Program Design

- Multi-year, individualized approach
- Recruit lakes with a management plan and key stewards
- Develop individual action plans so lake community sets their own priorities-consistent with their objectives and those of AAP
 - Wetland evaluation, shoreline assessment, shoreline restoration, hands-on community workshops, bio-blitzes



Program Evaluation

- Measurement of area restored for wildlife
 - Before and after surveys of lake shorelines in areas where assessments are being carried out
 - Areas created for wildlife (i.e. nesting beaches, basking sites)
- Record data obtained through Ontario Turtle Tally and Frogwatch Ontario monitoring programs
- Record number of individuals involved in volunteer workshops, events, etc.
- Monitor status of wetlands and determine number of sites that are being protected through lake stewardship or legislation



Marketing and Branding



- Partnership with FOCA
- Ads in Cottage Life, community papers, Lake Association Newsletters
- School visits in regions around each target lake
- Focus on actions not just education
- Visits to commercial properties on each target lake

Next Steps for Community Engagement

- Audience segment research
 - To understand sub-groups of waterfront property owners e.g., marinas, summer camps, etc.,
- Naturalists
 - Hands-on programming for a high-impact audience
 - Urban audiences
 - Relevant to Toronto's diverse population and valuable for those in the process of settlement



Conclusions and Lessons Learned

- Our values are not shared values
- Focus groups are critical to program success
 - Even a few opinions are better than none
- Partnerships are key
 - Know your strengths and know where to back off
- Be strategic with your money
 - Invest where you can have an impact



Thank You

Erin Nadeau
enadeau@torontozoo.ca
aap@torontozoo.ca

